Energy Section Annual Report Energy and Waste Management Bureau Iowa Department of Natural Resources State Fiscal Year July 1, 2005 until June 30, 2006

<u>Mission</u>: The mission of the lowa Energy Office is to increase the use of energy efficiency and renewable energy technologies while ensuring the reliability of the state's power.

<u>Introduction</u>: This report details the fiscal year results of Energy Section activities, as recorded by the Energy Section Staff. It includes the results of grant activities completed in partnership with the U.S. Department of Energy as well as other energy related projects. This report will serve as the benchmark for future annual reports.

<u>lowa Energy Bank:</u> provides the technical and financial assistance necessary for creating energy management improvements for lowa public schools, hospitals, private colleges, private schools, and local governments. The Energy Bank is responsible for saving lowa government and public facilities hundreds of thousands of dollars on yearly energy costs. Staff answered 65 client questions, performed 12 marketing visits, conducted 19 energy audits, and provided nine technical quality reviews.

<u>SIFIC</u>: is a non-profit organization that contracts with the DNR for staff. It is a full-service program designed to implement energy efficiency projects in state owned and operated facilities. Executive Order 41 accelerated the implementation of several SIFIC projects and has served as a catalyst for renewed interest in SIFIC by other state agencies. SIFIC staff assisted seven clients with program questions, completed three marketing visits, and performed 14 energy audits.

Renewable Energy: staff provides training and assistance to promote the implementation of renewable energy technologies statewide. For this fiscal year, Energy Section staff completed both Solar Yellow Pages and Wind Yellow Pages documents and posted them on the Energy Section Web site. In addition, staff assisted 76 clients with solar questions, 89 clients with wind questions, 78 clients with ethanol questions, eight clients with questions on combined heat and power (CHP), 37 clients with biodiesel questions, and 54 clients with biomass questions.

<u>Community Based Digester Outreach:</u> is major initiative of the section. Staff visited numerous lowa communities to introduce the concept of anaerobic digesters to areas having high concentrations of animal feeding operations, food processing wastes, and other organic waste streams. Staff assisted 43 clients, resulting in a feasibility study in Webster City and investors planning construction of a large digester project in Hull. These digesters produce methane for CHP or to replace natural gas. We are also promoting a closed loop system; whereby, an animal feeding operation provides the manure for a digester that produces methane for an ethanol plant that produces distillers grains to feed the cattle.

USDA Farm Bill Section 9006: was another program Energy Section staff participated in to assist lowa farmers and ranchers and rural small businesses. For 2006, the Energy Section and our partners supported 80 applications. Iowa received 52 of the 375 grants awarded this year, second highest in the country. Iowa grant awards totaled \$1,190,854. Additionally for 2006, Iowa received 10 of the 16 combination grant / guaranteed loan awards granted. Of the combination awards, Iowa applicants received \$7,300,560 in guaranteed loans and \$2,514,710 in grants.

<u>Transportation and Alternative Fuels:</u> staff routinely issue press releases on current and future fuel prices, alternative fuels purchased, natural gas prices, propane prices and heating oil prices. Staff issued 18 press releases, responded to 42 client questions, and answered 132 questions from the press on fuel prices. Hurricanes, political unrest, and international terrorism are just a few of the things that affect fuel prices.

Energy Efficiency: questions from the public, contractors, and state agencies are another staff responsibility. Staff responded to 61 inquires on energy efficiency and helped 43 clients with building code questions.

<u>lowa Solar Project in Cedar Rapids:</u> or the New Bohemia Solar Project was a collaboration of the lowa Renewable Energy Association, Alliant Energy, the City of Cedar Rapids, the Thorland Company (private owners of the property where the Project was installed), and the lowa Department of Natural Resources. The partners came together to erect a solar array in the "New Bohemia" neighborhood on the southeast side of Cedar Rapids. The array provides 7,200 watts of electricity to Alliant Energy's Second Nature customers and serves as an educational tool and a visual symbol of the neighborhood's rebirth.

<u>Iowa Rebuild America 2005:</u> grant accomplishments included partnering with the University of Northern Iowa, Scott Community College, Hamilton County, and Muscatine County to educate communities about energy efficiency and renewable energy, create a job shadow program, implement energy management improvements, and produce and deliver a University Community Educational video.

<u>Building America 2006:</u> grant and Energy Section staff assistance led to the construction of an affordable and highly energy efficient home in Fort Dodge.

<u>Wood by-product workshop in Washington Iowa</u>: June 7th brought together wood by-product generators and potential end users to investigate the opportunities for using those by-products as a renewable energy resource.

<u>Energy Efficiency and Renewable Energy Presentations:</u> were presented by section staff at a total of 38 conferences, workshops, and community meetings.

<u>Conclusion</u>: The Energy Section serves lowa citizens and their communities and businesses by providing information lowans can use to make smart energy choices for the future. This past year, Energy Section staff dropped from 16 to eight, primarily due to budget concerns. To overcome those staffing shortfalls, we have regrouped to concentrate on the work we do best and the work that is not being performed by others. We have submitted a prefile bill to combine Energy Bank and SIFIC programs, with the intent of increasing staff efficiency.

The Energy Section continues to present outreach to inform communities about the potential of methane to replace natural gas, particularly for ethanol production and other industries with large energy demands. Additionally, we have submitted a grant application to the National Renewable Energy Laboratory to bring a wind test blade facility to lowa that would be the largest in the United States. The Energy Section will also serve to facilitate the development of a "Bio-City" in lowa that generates the majority of its power from renewable energy.

Fiscal Year Activities Report

Activity Type	FY2006
Alternative Transportation/Fuels	42
Anaerobic Digester Assistance	43
Attend Conference, Workshop, Training, Community Meeting, Presentation	31
Bill Summary/Fiscal Note	30
Biodiesel Assistance	37
Biomass Assistance	54
Building America Assistance	15
Building Codes Assistance	43
CHP Assistance	8
Data Tracking (E-10, E-85, SHOPP, Petro Update, Fuel Prices)	89
Develop/Present at Conference, Workshop, Training, Community Meeting, Presentation	
Energy Assurance Assistance	3
Energy Bank Assistance	65
Energy Bank Marketing Presentation	12
Energy Bank Site Visit (Energy Audit)	19
Energy Bank Technical Quality Review	9
Energy Efficiency Assistance	61
Energy Efficiency/Renewable Energy (EE/RE) Application Contact	2
Energy Emergency Preparedness	7
EO-41 Data Gathering	5
EO-41 Training/Assistance	3
Ethanol Assistance	78
Farm Bill Assistance	132
Funding/Incentives Assistance	75
Governor's Memo	6
Grant Development/Review	11
Landfill Methane	9
LCCA Technical Quality Review	3
Legislator Contact	22
Media Interview/Inquiry	142
Policy Assistance	43
Press Release	18
Rebuild Assistance	12
Rebuild RFP/Contract	10
SIFIC Assistance	7
SIFIC Marketing Presentation	3
SIFIC Site Visit (Energy Audit)	14
Solar Assistance	76
Wind Assistance	89